

### **REMARKS**

This amendment is responsive to the Office Action of December 10, 2007 asserting that there was no response in Applicants' amendment of October 1, 2007 replying to the allegation in the Office Action of July 3, 2007 that there is no definition presented in the specification which would indicate the meaning of the concept of diffusional selectivity, and further that the amendment to claim 1 appears to be incomplete.

With respect to the concept of diffusional selectivity, it is clear from the specification that the outer layer having a thickness between 0.1  $\mu\text{m}$  and 100  $\mu\text{m}$  constitutes an extremely thin film through which fluids can permeate at different rates of diffusion. Thus, one of ordinary skill in the adsorption and membrane separation art would readily comprehend the concept of diffusional selectivity. Furthermore, the discussion on pages 11 and 12 of the specification provide examples of diffusional selectivity in Table 1 and times of diffusion in Table 2. The Examiner during a telephone conference on December 18, 2007, suggested that in view of the discussion on pages 11 and 12 which clarifies the meaning of diffusional selectivity that it is unnecessary to include in the claim the expression "measured as the ratio of diffusion coefficients ( $\text{m}^2/\text{sec}$ ) at 200°C of 3-methylpentane/2,2-dimethylbutane". Accordingly, the claim is now amended by omitting this expression.

Also, the garbled last line of claim 1 is now replaced by the intended limitation "said core having a diffusional selectivity lower than that of the outer layer".

Counsel for Applicants wish to thank the Examiner for the suggestions which have resulted in a clarification of claim 1 and the meaning of "diffusional selectivity".

If there are any further requirements for purposes of clarification, Counsel courteously invites the Examiner to telephone Counsel at the number indicated below, but if Counsel is unavailable, the Examiner is invited to telephone Ms. Richardson at 703-812-5326 and she will enlist the help of another attorney.

The Examiner is thanked for her time and interest during the telephone conference of December 18, 2007.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

/I. William Millen/

---

I. William Millen, Reg. No. 19,544  
Attorney/Agent for Applicant(s)

MILLEN, WHITE, ZELANO  
& BRANIGAN, P.C.  
Arlington Courthouse Plaza 1, Suite 1400  
2200 Clarendon Boulevard  
Arlington, Virginia 22201  
Telephone: (703) 243-6333  
Facsimile: (703) 243-6410

Attorney Docket No.: PET-2171

Date: December 19, 2007

IWM:pdr